

Trauma Plan Development Guidelines

**EMSA #151
January 2000**

This document is intended to provide EMS agencies with minimum guidelines for preparing trauma plans for submission to the EMS Authority in accordance with Sections 100236-100266 of the trauma regulations (Title 22, Division 9, Chapter 7 of the California Code of Regulations). Please ensure the format provided in the guideline is followed. This will provide standardization for the trauma plans and expedite the review process. Additional sections may be added as deemed appropriate by the local EMS Agency.

NOTE: §100253 (a) requires LEMSAs implementing a trauma care system to develop a written trauma care system plan.

§100253 (i) requires LEMSAs to submit, for EMSA approval, any significant changes to an already approved plan.

§100253 (j) requires LEMSAs to submit a trauma system status report as part of its annual EMS plan update which addresses the status of trauma plan goals and objectives.

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TRAUMA PLAN FORMAT

The format outlined below incorporates the minimum regulatory requirements for a trauma plan submitted to the EMS authority for approval. Local EMS agencies may add additional sections or items within sections where they deem appropriate, however, the following must be included:

Table of Contents

A table of contents must be included that identifies, at a minimum, where information specifically related to §100254-Trauma System Criteria, §100255-Policy Development, §100256-Trauma Plan Development, and §100257-Data Collection can be found in the plan. Any additional sections should also be included in the table of contents for easy reference. Trauma plans submitted that do not have a table of contents in this format will be returned.

NOTE: §100256 (a)(11) requires table of contents to specify location of information related to §100254, §100255, §100256, and §100257.

Section I Summary of Plan

The design of the trauma plan should be explained in this section along with relevant background information. The plan summary should also address any major problems and proposed solutions [§100256(1)].

Section II Organizational Structure

This section should provide information regarding the management and administration of the proposed trauma system (e.g., LEMSAs, hospital, medical director role/relationship) [§100256(2)]. An organization chart is desirable. If the organizational structure for the trauma system is the same as the EMS system and this information is included in your EMS plan, reference to the EMS plan document (section and page number) is sufficient.

Section III Needs Assessment

A needs assessment should be provided which supports the proposed trauma system design, designation, and level of trauma center(s) [§100256(3)].

Section IV Trauma System Design

The trauma system plan must be comprehensive and fully explained in this section. It should outline the inclusive trauma system design, including those facilities involved in the care of acutely injured patients, and outline coordination with neighboring agencies [§100256(a)(4)]. Trauma plans must include a description of the rationale used for trauma system design planning for the number and location of trauma centers [§100254(a)] including:

- (1) Projected trauma patient volume and projected number and level of trauma centers necessary to provide access to trauma care [100254(a)(1)] (*For Level I and II Trauma Centers only*).
 - (A) No more than one Level I or II trauma centers shall be designated for each 350,000 population within the service area [100254(a)(1)(A)].
 - (B) Where geography and population density preclude compliance with above, exemptions may be granted by the EMS Authority with the concurrence of the Commission on EMS on the basis of documented local needs [100254(a)(1)(B)]. (See Appendix A)
- (2) In addition, Level I trauma centers shall have [§100260(a)]:
 - (A) A minimum of 1200 trauma program hospital admissions, or
 - (B) A minimum of 240 trauma patients whose Injury Severity Score (ISS) is greater than 15, or
 - (C) An average of 35 trauma patients (with an ISS score greater than 15) per trauma program surgeon per year.
- (3) Level III and IV centers have no volume or population requirements.
- (4) Resource availability to meet staffing requirements for trauma centers [§100254(a)(2)][Note: trauma center resource requirements outlined in §100259-100264]
- (5) Transport times [§100254(a)(3)]
- (6) Service areas [§100254(a)(4)]
- (7) Coordination with neighboring trauma systems [§100254(a)(5)].
- (8) Prehospital Services [§100254(b-f)]
- (9) The system design should also include aspects of hospital service delivery as follows [§100256(b)]:
 - (A) Critical Care Capability
 - (B) Medical Organization and Management
 - (C) Quality Improvement

Note: 100257(c) requires LEMSAs to advise the EMS Authority of policy or plan development changes or revisions.

Section V Intercounty Trauma Center Agreements

Agreements between counties related to trauma centers should be described in this section. Copies of intercounty trauma center agreements approved by each county LEMSA should also be included [§100256(5)].

Section VI Objectives

The plan objectives should be comprehensive, clearly stated, and measurable. The plan should specifically state each planned accomplishment and the expected outcome [§100256(6)].

Section VII Implementation Schedule

This section should provide the starting and completion dates for the implementation of the trauma system plan and its objectives [§100256(7)].

Section VIII Fiscal Impact

A fiscal impact must be included that outlines the costs of the trauma system design. It should include all relevant impacts including the impact to hospitals, LEMSA, EMS resources, patients, etc [100256(8)]. It should focus on demonstrating the viability of the established trauma center.

Section IX Policy and Plan Development

LEMAs must develop policies which provide a clear understanding of the structure of the trauma system and the manner in which it utilizes the resources available to it. The minimum required policies are listed in §100255. If a LEMSA incorporates more stringent standards than those outlined in the regulations, they should be included in this section. Policies should, at a minimum, be listed in this section. Actual policies may be included in an addendum.

Note: The provisions in §100265-Quality Improvement must be included in the policy developed for 100255(o) and provisions in §100266-Transfer of Trauma Patients must be included in the policy developed for 100255(i)

Section X Written Local Approval

This section should summarize the process followed to obtain local plan approval along with written documentation of the approval (e.g. resolution, Board of Supervisor meeting minutes).

Section XI Data Collection

LEMAs shall ensure collection of data as outlined in §100257, including:

- (1) Development and implementation of a standardized data collection instrument and implementation of a data management system for trauma care [100257(a)(1), (2), (3)].

- (2) Prehospital data must include data elements as provided in §100129 of the EMT-II Regulations and §100176 of the EMT-P regulations.
- (3) Hospital data shall include data as outlined in §100257(c).

This section should outline how the requirements specified in §100257 will be met and specify any additional requirements by the LEMSA. Specific required data elements should be listed or a statement made which indicates that the minimum regulatory requirements are to be met.

Section XII Trauma System Evaluation

This section should outline how the LEMSA will provide for trauma system evaluation given the provisions in §100258 which include:

- (1) Development and ongoing evaluation of trauma center.
- (2) Development of process to receive information regarding trauma plan, triage criteria, activation of trauma team, and notification of specialists.
- (3) Periodic performance evaluation of trauma system (every two years).
- (4) LEMSA ensure that facilities treating trauma patients participate in quality improvement process.

POPULATION EXEMPTION PROCESS

Local EMS agencies that do not have 350,00 population may request an exemption on the basis of documented local needs. Documentation should include:

- Information on the circumstances which preclude compliance with the trauma system criteria.
- Population statistics including student, tourist, and other transient population that would be served.
- The volume of trauma patients. What percent of the population will be trauma patients? What situations affect the volume of the trauma patients? (i.e., traffic accidents, industrial accidents, or other situations that would impact the need for a trauma center).
- A detailed explanation as to why agreements cannot be reached with neighboring jurisdictions.
- The time and/or geographic constraints that preclude utilization of trauma centers in other jurisdictions.
- The availability of helicopters for transporting patients to trauma centers in other jurisdictions.
- A description of patient flow patterns. Where are severely injured patients in your jurisdiction currently being transported?
- Other pertinent information.